GOVERNMENT OF INDIA
WATER RESOURCES
LOK SABHA

UNSTARRED QUESTION NO:1546
ANSWERED ON:02.08.2000
RAIN WATER HARVESTING
JITENDRA PRASADA

Will the Minister of WATER RESOURCES be pleased to state:

(a) whether a new technology for water conservation has been finalised by the Indian Institute of Technology that would successfully tap rain water; and

(b) if so, the details thereof and the extent to which it is likely to solve water crises all over the country?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SMT. BIJOYA CHAKRAVARTY)

(a) & (b) A statement is enclosed.

STATEMENTREFERRED TO IN REPLY TO PARTS (a) & (b) OF LOKSABHA UNSTARRED QUESTION NO.1546 FOR REPLY ON 02.08.2000

According to the information furnished by the Ministry of Human Resource Development, Department of Secondary and Higher Education, the following technologies for rain water harvesting and conservation are now available at Indian Institute of Technology (IIT) Delhi.

(i) Rain water harvesting and storage of water in above and under ground tanks.
(ii) Rain water harvesting and recharging of existing wells, tube wells etc.
(iii)Water harvesting for recharging of aquifer and soakage into the ground.

Under the domestic roof water harvesting for drinking water supply, rain water falling on the roof is collected through gutters and lead into above or underground water tanks. To ensure better water quality, the 1st flush rain is collected separately and discarded. This technology is particularly useful for hilly areas, islands and areas where the ground water is contaminated by chemical impurities such as arsenic and fluoride. This technology is an improved version of traditional technologies already available in different parts of the country.

IIT Delhi has implemented various technologies for rain water harvesting and recharging the ground water. The technology essentially comprises channeling the rain water into the water source after appropriately eliminating harmful contaminants. These efforts not only help in increasing ground water level but are also beneficial in terms of better drainage of rain water leading to better sanitation and control of mosquito breeding.

The IIT Delhi has also developed expertise in software technology useful for integrating various issues related to rain water harvesting for large scale operation in a water shed. Following benefits are expected from the new technology:-

(i) Larger water availability over the year

(ii) Flood damage reduction

(iii) Higher dry season water availability

(iv) Reduction in storm water flooding on roads

(v) Reduction in requirement of external application of water or crops

(vi) Reduced incidence of mosquito borne diseases